DOCUMENT RESUME

ED 237 940 CS 007 424

AUTHOR Marzano, Robert J.
TITLE A Concept Development Based Approach to Vocabulary Instruction.
PUB DATE 83
NOTE 45p.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Concept Formation; *Concept Teaching; Elementary Education; *Language Arts; Language Experience Approach; *Teaching Methods; *Vocabulary Development; Vocabulary Skills; Word Lists

ABSTRACT

Vocabulary development, operationally defined as the isomorphism between an individual's store of concepts and the labels society uses to represent those concepts, is akin to concept development. Therefore, vocabulary development can be facilitated if presented in clusters of related concepts. One approach used to reinforce such basic concept clusters involves students in four steps: (1) brainstorming for words similar or related to the words from the representative concept list; (2) visualizing the meaning of each word; (3) using concepts generated during the first step in as many different forms as possible; and (4) examining affixes to identify derivational forms of words used in the first activity. Students can also use macrostructures, made from groups of related structures, as topics for language experience stories and as a broad framework for concept and vocabulary development. (Appended is a list of 430 concept clusters, derived from 7,000 most frequently used words in elementary school textbooks, arranged in such a way as to be easily grouped into macrostructures.) (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED237940

A CONCEPT DEVELOPMENT BASED APPROACH TO VOCABULARY INSTRUCTION

BY

Robert J. Marzano, Ph.D.

Mid-continent Regional Educational Laboratory

Spring, 1983

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Robert J. Marzano

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 007 424

The purpose of this paper is to describe a methodology for vocabulary development which is based on a model of concept development. The importance of vocabulary development has been recognized from many quarters. Anderson and Freebody (1981) report that the strong relationship between vocabulary and general intelligence is one of the most robust findings in the history of intelligence testing. An equally consistent finding has been that word knowledge is strongly related to reading comprehension. Given the importance of vocabulary development it seems self evident that an instructional methodology which increases a student's vocabulary might also increase the student's performance in reading comprehension and other related areas. The foundations of such a methodology are perhaps embedded in the answer to the question: "What does it mean to know the meaning of a word?"

Labov (1973, p.341) has stated that "words have often been called slippery customers and many scholars have been distressed by their tending to shift their meaning and slide out from under any simple definition." Labov's position suggests that knowing the meaning of a word is not synonymous with word knowledge. It has been suggested that most articulate adults can accurately define only a small portion of the words they know and use quite effectively. In fact, it has been shown that adults have difficulty defining such seemingly simple words as cup (Labov, 1973), eat (Anderson and Ortony, 1975) red (Halff, Ortony and Anderson, 1976) and held (Anderson et al, 1976). How, then, can we explain word knowledge?

To understand word knowledge we must deal with the issue of concept development. A word is probably most accurately defined as the "label" society places on a concept. A concept is defined in a

complementary fashion--"the socially accepted meaning of one or more words which express the concept" (Klausmeier and Sipple, 1980, p.22). For example, the word dog is a label society uses to represent the conceptual representation of a set of four legged animals with certain characteristics. Vocabulary knowledge, then could be operationally defined as the isomorphism between an individual's store of concepts and the labels society uses to represent those concepts. If this perspective is at all true, we can say that vocabulary development is akin to concept development. Let us consider how an individual might learn a new concept.

Assume that a student is introduced to the concept domicile. At first the student might learn that such concepts as house and home are similar to or examples of the concept domicile. The student might then learn that such concepts as building and structure have some similarities with domicile but are different in some respects. When the student establishes enough "points of reference" with which to define (not in a literal sense) domicile we say the student understands the concept. It is the comparing and constrasting of new concepts with previously stored concepts that culminates in what we call concept knowledge. Perhaps this is one reason why two literate individuals have trouble defining a common word in the same way. Both individuals might have different defining concepts which they use for comparative purposes. In general they have the same working knowledge of the concept but use different points of reference.

Given the validity of this model of concept development it makes sense that student vocabulary development could be facilitated if vocabulary was presented in clusters of related concepts. For this purpose the 7,000 most frequently used words in elementary school

textbooks were grouped into 430 concept "clusters." Before discussing the possible uses of these clusters we will first consider how they were developed.

A LIST OF BASIC CONCEPT CLUSTERS

How can we best group educational concepts so as to facilitate a student's concept and vocabulary development. In truth there is no best way; any group of concepts can be categorized in many different ways. To illustrate consider the following:

- car
- boat
- rail
- bicycle
- water
- road
- train
- cable car
- raft

One way of grouping these concepts might be:

Group 1	Group 2	Group 3
car	train	boat
bicycle	rail	raft
road	cable car	water

Here group 1 contains land vehicles and the medium they travel on; the other groups also contain vehicles or modes of transportation and their mediums of travel. But we could also have categorized the concepts in the following way:

Group 1	Group 2
car	rail
bicycle	road
train	water
cable car	
boat	
raft	

Here group 1 contains vehicles and group 2 contains mediums of travel. Which grouping is the correct one? Of course, neither. Any grouping depends on the initial perspective taken by the individual doing the grouping. Given this lack of singularity of answer surrounding the question of how best to group concepts, what scheme can be used to accomplish the task? Below is a description of the scheme that was used to develop the 430 basic concept clusters.

1) The 7,000 most commonly used words in elementary school textbooks were identified using the Basic Elementary Reading Vocabulary (1972) and The Teachers Word Book of 30,000 Words (1943).

2) Those words were then categorized by one researcher (the author) using the general rule of thumb: "What grouping would be most applicable to a classroom instructional setting."

3) The concept clusters were then reviewed by elementary school teachers who were asked to identify "any word that does not fit well in an instructional sense."

4) All identified words were then reclassified.

Steps 3 and 4 above were repeated until less than one word in one hundred was identified as miscategorized. Hence there is over 99% agreement by the participating teachers (60 elementary school teachers) that the words are categorized appropriately for instructional use. The result of this effort is a list of 430 basic concept clusters which represent the core concepts presented at the elementary school level (grades K-6). The entire list of clusters with all related concepts is

too lengthy to report in this paper. However, a list of the clusters with representative concepts is presented in the Appendix to this report. To illustrate the information presented in each concept cluster reported in the Appendix consider the two examples presented below:

Temperature:
- a) Representative Concepts:
  temperature, Fahrenheit, cold, cool, warm, heat, parch
- b) Grade Level Range:
  1-cold
  5-temperature
- c) Number of Concepts: 13

Grabbing Actions:
- a) Representative Concepts:
  grab, clasp, pluck, embrace
- b) Grade Level Range:
  1-hold
  6-clench
- c) Number of Concepts: 19

Note that for each concept cluster the following information is presented:

a) Representative concepts from the concept cluster; these words are representative of the characteristics of all words (concepts) within the cluster. Basically if synonyms and related words are identified for each representative word listed the majority of concepts within a cluster will be identified.

b) Grade level range: The word representing the lowest grade level at which the concept cluster appears and the word representing the highest grade level at which the concept cluster appears are reported. Also identified are concepts which are found primarily in selected content areas. The following code is used for that identifiecation:

  SS = Social Studies
  SC = Science
  EN = English
  MA = Math

c) Number of concepts: The total number of concepts in the cluster is reported.

The list of clusters in the Appendix represents a grouping of the concepts basic in grades K-6--a grouping that might facilitate their attainment by students.

In the Appendix those clusters are listed in such a way as to be easily grouped into what I call macro-clusters. (These are explained in a subsequent section). Below the clusters are rank ordered in terms of the number of concepts within a cluster. That is, the cluster with the highest number of concepts is listed first; the cluster with the lowest number of concepts is listed last. Since only the cluster numbers are reported below, the Appendix must be consulted to identifiy the cluster names:

# of Concepts in Cluster	Cluster #'s
96	Cluster #: 424
66	Cluster #: 28
58	Cluster #: 27
55	Cluster #: 219
54	Cluster #s: 220, 355
53	Cluster #: 41
51	Cluster #: 273
50	Cluster #: 422
49	Cluster #s: 146, 411, 423
46	Cluster #: 62
45	Cluster #s: 128, 233, 299, 303
44	Cluster #: 261
43	Cluster #: 48
40	Cluster #s: 184, 420
39	Cluster #: 430
38	Cluster #s: 53, 284, 360
37	Cluster #s: 45, 394
36	Cluster #s: 36, 74, 426
35	Cluster #: 368
34	Cluster #s: 127, 344
33	Cluster #: 350
32	Cluster #s: 26, 34, 35, 89, 277, 427
31	Cluster #s: 93, 147, 306, 393
30	Cluster #s: 265, 267, 364
29	Cluster #s: 143, 331, 380, 386, 406, 409
28	Cluster #s: 25, 61, 64, 76, 292, 375, 390
27	Cluster #s: 38, 123, 124, 137, 148, 171, 172, 211, 304

26	Cluster #s: 98, 105, 108, 182, 225, 231, 356, 369, 412
25	Cluster #s: 66, 92, 160, 183, 239, 251, 258, 352, 371, 354
24	Cluster #s: 56, 96, 144, 218, 264, 333, 357, 413
23	Cluster #s: 55, 120, 130, 177, 216, 229, 253, 255, 285, 378, 387, 425
22	Cluster #s: 18, 37, 69, 86, 121, 138, 162, 178, 181, 204, 209, 234, 272, 282, 302, 338, 385
21	Cluster #s: 191, 212, 217, 243, 265, 312, 345
20	Cluster #s: 1, 6, 14, 21, 95, 125, 203, 289, 301, 311, 359, 365
19	Cluster #s: 106, 122, 185, 226, 351, 347, 417, 429
18	Cluster #s: 31, 46, 47, 52, 83, 103, 126, 167, 262, 348, 358, 383, 415, 429
17	Cluster #s: 73, 79, 97, 195, 196, 210, 228, 287, 290, 291, 294, 419
16	Cluster #s: 40, 42, 44, 58, 166, 176, 187, 206, 207, 271, 300, 374, 384
15	Cluster #s: 39, 101, 157, 158, 164, 173, 186, 222, 247, 283, 293, 332, 342, 367, 379, 392, 416
14	Cluster #s: 7, 33, 99, 132, 150, 175, 192, 237, 238, 268, 269, 314, 334, 340, 349
13	Cluster #s: 9, 50, 54, 161, 208, 230, 242, 249, 259, 260, 305, 307, 381, 418
12	Cluster #s: 23, 65, 94, 134, 139, 145, 151, 154, 193, 194, 213, 248, 278, 288, 330, 391, 407
11	Cluster #s: 10, 24, 29, 63, 71, 77, 118, 133, 135, 136, 149, 152, 153, 155, 168, 174, 215, 257, 279, 281, 308, 309, 313, 323, 343, 353
10	Cluster #s: 8, 13, 15, 16, 49, 142, 165, 198, 200, 205, 245, 246, 254, 270, 274, 275, 280, 286, 366, 414
9	Cluster #s: 32, 57, 59, 68, 78, 159, 214, 221, 224, 244, 250, 310, 325, 389
8	Cluster #s: 22, 51, 70, 85, 179, 188, 190, 241, 256, 320, 322, 335, 363, 376, 382, 388, 405

7	Cluster #s:	60, 90, 100, 102, 104, 156, 169, 197, 296, 297, 321, 341, 395, 399, 402, 404
6	Cluster #s:	3, 4, 17, 19, 20, 75, 81, 82, 84, 109, 111, 113, 116, 170, 180, 223, 232, 263, 276, 324, 336, 337, 339, 346, 377, 397, 408, 421
5	Cluster #s:	30, 72, 80, 91, 107, 110, 115, 119, 131, 140, 201, 295, 315, 327, 328, 362, 370, 372, 400
4	Cluster #s:	2, 5, 12, 43, 88, 114, 163, 199, 202, 235, 298, 317, 319, 326, 361, 396, 401, 410
3	Cluster #s:	67, 87, 112, 117, 141, 189, 227, 236, 240, 252, 316, 318, 398
2	Cluster #s:	329, 373, 403

TEACHING THE BASIC CONCEPT CLUSTERS

There are a number of activities which might be used to teach and reinforce the basic concept clusters. Below is outlined a four step procedure:

1) In a brainstorming fashion have students identify words that mean about the same thing or are related to the words presented in the representative concept list. Discuss the meaning of the generated words and the words on the list. This can be done in a "It's like a _____ but _____" context.

2) Have students visualize the meaning of each word.

3) Have students use each concept generated in activity #1 above in as many different forms as possible. For example have them use nouns in their singular and plural forms; verbs in their infinitive, participial and third person singular forms; adjectives in their comparative and superlative forms.

4) Using the affixes listed below have students identify the various derivational forms for each word identified in activity #1.

Suffixes marking nouns: -acy, -age, -ance, -ancy, -ant, -ar, -ard, -ary, -ate, -cy, -dom, -ee, -eer, -ence, -ency, -ent, -er, -ery, -ess, -ette, -hood, -ice, -ie, -ier, -ite, -ism, -ist, -ity, -ive, -kin, -let, -ment, -mony, -ness, -or, -ory, -ship, -ster, -teen, -tion, -tude, -ty, -ure, -y, -yer

Suffixes marking verbs: -ate, -en, -fy, -ify, -ise, -ize

Suffixes marking adjectives: -able, -ac, -aceous, -al, -am, -ar, -ary, -ate, -ble, -ent, -er, -ern, -escent, -ful, -ible, -ic, -ical, -id, -ile, -ine, -ish, -less, -like, -ly, -ory, -ose, -ous, -some, -ty, -ulent, -wise, -y

Suffixes marking adverbs: -ally, -fold, -likely, -ly, -ward, -ways, -wise

To illustrate assume that a teacher is attempting to teach and reinforce the concept cluster presented earlier called "temperature." The teacher would first present students with the words on the representative list for that category. They are:

cold

cool

warm

heat

parch

temperature

Fahrenheit

Of course the teacher should first determine if all words on the list are appropriate for the students. For example, a second grade teacher might decide to exclude the concepts parch and Fahrenheit. The students would then be asked to identify in a brainstroming fashion as many words as possible which are similar to or related to the words on the list. Notice that the words on the list represent different syntactic categories (eg. cold and cool are adjectives; warm can be an

adjective or a verb; parch is a verb; temperature and Fahrenheit are nouns.) Hence when the students generate words, those generated words will also represent different syntactic categories. For example, assume that the students generated the following:

hot

freezing

cook

boil

The students would then be asked to discuss the meaning of each generated word and representative word. Students should be encouraged to define words by comparing and contrasting them with others. For exmaple, a student might say:

"cold is like cool, but it is a little cooler."

"warm is like hot, but it is a little less hot."

"Freezing is like cold, but it is a little colder."

"Cook is putting something in an oven or surrounding it with a lot of heat."

"temperature is a way of measuring how hot or cold something is."

At this point the teacher might add any words he/she feels the student should know. For example, a sixth grade teacher might want to add the concepts centigrade and Kelvin. Definitions for these words could be formulated using the definitions already established. The whole point in generating definitions is to have students see the interrelationship among all the words and to establish concepts to which new concepts can be attached. For example, once the concept temperature has been firmly established Fahrenheit, centigrade and Kelvin are much more easily introduced.

The next process is to have students visualize the concepts being learned. The point here is to have students make as many associations as possible relative to each concept. One of the strongest types of associations is visual.

Visualizing takes the form of students picturing some concrete object or event they can associate with the concept being learned. For example, the following visualizations could be made for some of concepts from the category "temperature"

"cold": the student visualizes an artic scene and superimposes the word cold over the scene much like a caption on a picture.

"parch": the student visualizes a man walking through the desert in search of water. There is a visual close-up of the man's mouth. The word parch is superimposed on the picture.

A third step in the concept attainment process is to have students use each word in as many different forms as possible within each words syntactic category. For example, nouns should be used in their singular, plural and possessive forms:

temperature

temperatures

tempertaure's

Adjectives and adverbs should be used in their comparative and superlative forms:

cold

colder

coldest

Verbs should be used in their infinitive, third person singular and participial forms:

parch

parches

parched

The final step is to identify derivational forms for each word using the list of derivational affixes listed in step 4.

cold + ness = coldness

cold + ly = coldly

This four step process is fairly easy to integrate into most instructional settings. Some teachers combine the activities listed above with their own techniques for improving vocabulary or concept development. For example, it is probably a wise idea to use the activities above in conjunction with personal vocabulary notebooks. The general rule of thumb when reinforcing concept/vocabulary development is to give students as many avenues of association as possible.

MACRO-CLUSTERS

Macro-clusters are groups of related clusters. There are 58 such macro-clusters. They are named and rank ordered below by the total number of concepts within each macro-cluster:

NAME OF MACRO-CLUSTER	CLUSTERS IN MACRO-CLUSTER
1) Occupations # of concepts=364 # of clusters= 30	Cluster #s: 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330.
2) Types of Motion # of concepts=321 # of clusters= 24	Cluster #s: 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92.
3) Size/Quantity # of concepts=310 # of clusters= 11	Cluster #s: 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35.

4) Animals
# of concepts=289
# of clusters= 15
Cluster #s: 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271.

5) Feelings/Emotions
# of concepts=274
# of clusters= 16
Cluster #s: 377, 378, 379, 380, 381, 382 383, 384, 385, 386, 387, 388, 389, 390, 391, 392.

6) Food Types/Meals
# of concepts=263
# of clusters= 15
Cluster #s: 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189.

7) Time
# of concepts=251
# of clusters= 11
Cluster #s: 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128.

8) Machines/Engines/ Tools
# of concepts=244
# of clusters= 14
Cluster #s: 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 64.

9) Types of People
# of concepts=237
# of clusters= 15
Cluster #s: 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300

10) Communication
# of concepts=227
# of clusters= 10
Cluster #s: 355, 356, 357, 358, 359, 360, 361, 362, 363, 364.

11) Transportation
# of concepts=205
# of clusters= 8
Cluster #s: 41, 42, 43, 44, 45, 46, 47, 48.

12) Mental Actions
# of concepts=195
# of clusters= 12
Cluster #s: 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376.

13) Nonemotive Human Traits
# of concepts=175
# of clusters= 16
Cluster #s: 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408.

14) Location/Direction
# of concepts=172
# of clusters= 12
Cluster #s: 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232.

15) Literature/Writing
# of concepts=171
# of clusters= 9
Cluster #s: 342, 343, 344, 345, 346, 347, 348, 349, 350.

16) Water/Liquids
# of concepts=164
# of clusters= 9
Cluster #s: 272, 273, 274, 275, 276, 277, 278, 279, 280.

17) Clothing
# of concepts=161
# of clusters=12
Cluster #s: 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256.

18) Places Where People Live/Dwell
# of concepts=154
# of clusters= 4
Cluster #s: 217, 218, 219, 220.

19) Noise/Sounds
# of concepts=143
# of clusters= 5
Cluster #s: 144, 145, 146, 147, 148.

20) Types of Land
# of concepts=142
# of clusters= 8
Cluster #s: 209, 210, 211, 212, 213, 214, 215, 216.

21) Dwellings/Shelters
# of concepts=141
# of clusters= 13
Cluster #s: 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202.

22) Materials
# of concepts=140
# of clusters= 7
Cluster #s: 62, 63, 65, 66, 67, 93, 94.

23) The Human Body
# of concepts=128
# of clusters= 11
Cluster #s: 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159.

24) Vegetation
# of concepts=109
# of clusters= 5
Cluster #s: 281, 282, 283, 284, 285.

25) Groups of Things
# of concepts=116
# of clusters= 5
Cluster #s: 36, 37, 38, 39, 40.

26) Value/Correctness
# of concepts=108
# of clusters= 4
Cluster #s: 409, 410, 411, 412.

27) Similarity/ Dissimilarity
# of concepts=108
# of clusters= 4
Cluster #s: 427, 428, 429, 430.

28) Money/Finance
# of concepts=102
# of clusters= 7
Cluster #s: 331, 332, 333, 334, 335, 336, 337.

29) Soil/Metal/Rocks
# of concepts=102
# of clusters= 6
Cluster #s: 233, 234, 235, 236, 237, 238.

30) Rooms/Furnishings/ Parts of Dwelling
# of concepts= 97
# of clusters= 6
Cluster #s: 203, 204, 205, 206, 207, 208.

31) Attitudes — Cluster #: 424
# of concepts= 96
# of clusters= 1

32) Shapes/Dimensions — Cluster #s: 13, 14, 15, 16, 17, 18, 19, 20.
# of concepts= 90
# of clusters= 8

33) Destructive/Actions — Cluster #s: 95, 96, 97, 98.
# of concepts= 87
# of clusters= 4

34) Sports/Recreation — Cluster #s: 136, 137, 138, 139, 140, 141.
# of concepts= 80
# of clusters= 6

35) Language — Cluster #s: 351, 352, 353, 354.
# of concepts= 80
# of clusters= 4

36) Ownership/Possession — Cluster #s: 99, 100, 101, 102, 103, 104.
# of concepts= 68
# of clusters= 5

37) Light — Cluster #s: 6, 7, 8, 9, 10.
# of concepts= 68
# of clusters= 5

38) Causality — Cluster #s: 425, 428.
# of concepts= 59
# of clusters= 2

39) Weather — Cluster #s: 337, 338, 339, 340, 341.
# of concepts= 55
# of clusters= 5

40) Cleanliness/ Uncleanliness — Cluster #s: 172, 173, 174.
# of concepts= 53
# of clusters= 3

41) Popularity/Knowness — Cluster #s: 413, 414, 415.
# of concepts= 52
# of clusters= 3

42) Disease/Health — Cluster #s: 166, 167, 168, 169.
# of concepts= 51
# of clusters= 4

43) Physical Traits — Cluster #s: 162, 163, 164, 165.
# of concepts= 51
# of clusters= 4

44) Touching/Grabbing/ Action
# of concepts= 50
# of clusters= 3
Cluster #s: 105, 106, 107.

45) Pronouns
# of concepts= 50
# of clusters= 1
Cluster #: 422

46) Contractions
# of concepts= 49
# of clusters= 1
Cluster #: 423

47) Entertainment/ The Arts
# of concepts= 48
# of clusters= 4
Cluster #s: 132, 133, 134, 135.

48) Walking/Running Actions
# of concepts= 46
# of clusters= 5
Cluster #s: 108, 109, 110, 111, 112.

49) Mathematics
# of concepts= 46
# of clusters= 4
Cluster #s: 30, 31, 32, 33

50) Auxiliary/Helping Verbs
# of concepts= 46
# of clusters= 2
Cluster #s: 420, 421.

51) Events
# of concepts= 44
# of clusters= 3
Cluster #s: 129, 130, 131.

52) Images/Perceptions
# of concepts= 39
# of clusters= 2
Cluster #s: 142, 143.

53) Life/Survival
# of concepts= 38
# of clusters= 2
Cluster #s: 160, 161.

54) Conformity/Complexity
# of concepts= 34
# of clusters= 2
Cluster #s: 416, 417.

55) Difficulty/Danger
# of concepts= 30
# of clusters= 2
Cluster #s: 418, 419

56) Color
# of concepts= 29
# of clusters= 2
Cluster#s: 11, 12

57) Chemicals/Acids — Cluster #s: 239, 240.
# of concepts= 28
# of clusters= 2

58) Facial Actions — Cluster #s: 113, 114, 115, 116.
# of concepts= 21
# of clusters= 4

59) Fire — Cluster #s: 3, 4, 5.
# of concepts= 16
# of clusters= 3

Note that three of the macro-clusters are comprised of only one clurter (31, Attitudes; 45, Pronouns; 46, Contractions). This is because these clusters are large and represent distinct areas that logically stand alone. These 58 macro-clusters might be used as topics around which to develop language experience stories. They represent a broad framework around which concept and vocabulary development may take place.

SUMMARY

In an attempt to construct a vocabulary program which relies on some basic generalizations about concept attainment the 7,000 most frequently used words found in elementary school textbooks were categorized into 430 basic concept clusters. These clusters may be used to increase a student's knowledge of the concepts he/she will encounter in reading material and the labels (vocabulary words) used to represent those concepts. A methodology for teaching and reinforcing the concept clusters was presented.

REFERENCES

Anderson, R. and Freebody, P. "Vocabulary Knowledge," in J.T. Guthrie (Ed.) Comprehension and Teaching: Research Reviews. International Reading Association, 1981, pp. 77-117.

_____ and Ortony, A. "On Putting Apples into Bottles: A Problem of Polysemy." Cognitive Psychology, 1975, Vol. 7, 167-180.

_____ et al. "Instantiation of General Terms," Journal of Verbal Learning and Verbal Behavior, 1976, Vol. 15, 667-679.

Halff, H.M., Ortony, A. and Anderson, R.C. "A Context Sensitive Representation of Word Meanings." Memory and Cognition. 1976, Vol. 4, No. 4, 378-383.

Harris, A. J. and Jacobson, M.D. The Basic Elementary Reading Vocabulary, New York: MacMillan, 1972.

Klausmeier, H.J., and Sipple, T.S. Learning and Teaching Concepts. New York: Academic Press, 1980.

Labov, W. "The Boundaries of Words and Their Meanings," in C.J. Bailey and R. Shuy (Eds.), New Ways of Analyzing Variations in English. Washington, D.C.: Georgetown University Press, 1973.

Thorndike, E.L. and Lorge, I. The Teacher's Word Book of 30,000 Words, New York: Teacher's College Press, 1943.

(1.) Temperature
RC: temperature, Fahrenheit, warm, heat
GLR: 1-cold; 5-temperate
NC: 20

(2.) Insulation
RC: insulation, insulate
GLR: 6-insulate
SC: insulator
SS: fireproof
NC: 4

(3.) Fire
RC: fire, blaze, flame, burn, flicker
GLR: 1-fire; 6-smolder
NC: 6

(4.) Products of Fire
RC: ash, smoke
GLR: 2-smoke; 6-ember
NC: 6

(5.) Fire Producers
RC: burner, firewood
GLR: 4-firewood
SC: burner
NC: 4

(6.) Light/Lightness
RC: sunshine, lightness, gleam, bright
GLR: 1-light; 6-candlelight
NC: 20

(7.) Actions of Light
RC: sparkle, shimmer, brighten
GLR: 3-shine; 6-illuminate
NC: 14

(8.) Darkness
RC: shade, dark, blot, blacken
GLR: 1-dark; 6-blacken
NC: 10

(9.) Producers of Light
RC: flare, candle, lamp, beam
GLR: 1-light; 5-ray
NC: 13

(10.) Clarity
RC: clarity, dull, vague
GLR: 1-dim; 6-transparent
NC: 11

(11.) Colors
RC: red, blue, orange, yellow
GLR: k-green; 6-amber
NC: 25

(12.) Paint
RC: paint, dye
GLR: k-paint; 6-enamel
NC: 4

(13.) Shapes (General Names)
RC: shape, form, frame, figure
GLR: 2-shape; 6-outline
NC: 10

(14.) Circular or Curved Shapes
RC: circle, curve, sphere, round
GLR: 2-round; 6-oval
SC: circuit
NC: 20

(15.) Rectangular or Square Shapes
RC: square, retangular,cube
GLR: 2-block; 6-cubic
NC: 10

(16.) Straightness/Crookedness
RC: stripe, strip, crooked
GLR: 2-line; 6-crisscross
MA: linear
NC: 10

(17.) Sharpness/Bluntness
RC: sharp, dull, taper
GLR: 3-sharp; 6-blunt
NC: 6

(18.) Dimension
RC: long, length, height, thin, depth, wide
GLR: 1-long; 6-width
NC: 22

(19.) Fullness/Emptiness
RC: hollow, empty, full
GLR: 2-full; 5-swollen
NC: 6

(20.) Inclination
RC: level, steep
GLR: 2-flat, 6-erect
NC: 6

(21.) Size (Small/Large)
RC: tiny, large, small, vast
GLR: k-little; 6-monstrous
NC: 20

(22.) Measurement Actions
RC: measure, rank
GLR: 3-weigh, 6-monitor
NC: 8

(23.) Measurement Devices
RC: ruler, scale
GLR: 4-ruler, 6-gauge
NC: 12

(24.) Things Commonly Measured
RC: address, diameter, countdown
GLR: 3-longitude; 6-angle
MA: radius
NC: 11

(25.) Specific Units of Measurement
RC: inch, volt, pound, degree, gallon
GLR: 2-mile; 6-ounce
MA: centimeter
NC: 28

(26.) Partitives
RC: bit, section, factor, segment, category
GLR: 1-dot; 6-portion;
MA: subset
NC: 32

(27.) Amount (General)
RC: amount, lot, entire, abundant, extra, another, plenty, most, lack, only
GLR: 1-many; 6-unlimited

NC: 58

(28.) Cardinal/Ordinal Numbers
RC: number, first, initial, two, three
GLR: k-two; 6-digit
NC: 66

(29.) Specifiers
RC: each, this
GLR: k-the; 3-either
NC: 11

(30.) Branches of Mathematics
RC: math, geometry
GLR: 3-arithmetic; 5-algebra
NC: 5

(31.) Mathematical Quantites
RC: minimum, maximum, percent
GLR: 4-total; 6-percentage
MA: medium
NC: 18

(32.) Equations/Formulas
RC: formula, exponent
GLR: 5-equation
MA: divisor
NC: 9

(33.) Mathematical Operations
RC: addition, subtract, divide
GLR: 2-add; 6-minus
MA: subtraction
NC: 14

(34.) Diminishers
RC: roughly, merely, mainly, rather, somewhat, hardly, nearly,
GLR: 1-just; 6-precisely
NC: 32

(35.) Intensifiers
RC: totally, sure, almost, quite, thoroughly
GLR: k-too; 6-thoroughly
NC: 32

(36.) Group of Things (General)
RC: group, combination, network, bundle, assemble
GLR: 2-pile; 6-network
NC: 36

(37.) Small Groups of People/ Animals
RC: gang, chorus, flock, club, crew
GLR: 2-class; 6-throng
NC: 22

(38.) Political/Social Groups
RC: republic, country, legislature, culture, tribe
GLR: 2-country; 6-civilization;
SS: federation
NC: 27

(39.) Military Groups
RC: army, squad, patrol
GLR: 3-police; 6-squadron
NC: 15

(40.) Small Business/Social Groups
RC: committee, conference, audience
GLR: 4-council; 6-commission
NC: 16

(41.) Types of Transportation
RC: car, jeep, bus, bicycle, locomotive, buggy
GLR: 1-wagon; 6-chariot
NC: 53

(42.) Work Related Vehicles
RC: tractor, bulldozer, wheelbarrow
GLR: 2-tractor; 6-narrow
SS: reaper
NC: 16

(43.) Vehicles Used in Snow
RC: sled, toboggan
GLR: 2-sled; 6-snowplow
NC: 4

(44.) Vehicles Used for Air Transportation
RC: plane, blimp, rocket
GLR: 1-airplane; 6-aircraft
NC: 16

(45.) Vehicles Used for Sea Transportion
RC: ship, tanker, raft, battleship, barge, steamboat, sailboat
GLR: k-boat; 6-gondola
NC: 37

(46.) Parts of Vehicles
RC: wheel, headlight, hull, oar, wing
GLR: 2-tire; 6-gunwhale
NC: 18

(47.) Actions Specific to Vehicles
RC: fly, sail, ride
GLR: k-ride; 6-cruise
SS: navigate
NC: 18

(48.) Things Traveled On
RC: street, intersection, route, alley, tunnel, railroad, path, seaway, airfield
GLR: 1-road; 6-passageway
NC: 43

(49.) Machines
RC: equipment, hardware
GLR: 3-machine;
6-mechanism
NC: 10

(50.) Engines and Parts of Engines
RC: engine, throttle, jet
GLR: 3-motion; 6-diesel
NC: 13

(51.) Fuels
RC: fuel, gas
GLR: 2-oil; 5-petroleum
NC: 8

(52.) Appliances
RC: oven, heater, refrigerator, television
GLR: 1-t.v.; 5-griddle
NC: 18

(53.) Tools
RC: wench, crowbar, hammer, saw, hoe, chisel
GLR: 3-tool; 6-rasp
NC: 38

(54.) Tools Used for Cutting
RC: axe, sword, blade
GLR: 3-knife; 6-razor
NC: 13

(55.) Cutting Actions
RC: chop, mince, grind, cut
GLR: 1-cut; 6-mince
NC: 23

(56.) Fasteners
RC: hook, clamp, strap
GLR: 2-string; 6-rivet
NC: 24

(57.) Handles and Things Related
RC: latch, key
GLR: 2-handle; 6-knob
NC: 9

(58.) Miscellaneous Devices
RC: lever, pedal, pulley, wand
GLR: 2-roller; 6-gantry
NC: 16

(59.) Equipment Related to Vision
RC: telescope, camera
GLR: 3-camera;
6-periscope
NC: 9

(60.) Electronic Equipment
RC: transmitter, teletype
GLR: 4-robot; 6-computer
NC: 7

(61.) Utensils Used for Eating/Cooking
RC: spoon, pot, sieve, glass, dish
GLR: 1-pan; 6-ladle
NC: 28

(62.) Containers
RC: carton, crate, package, barrel, sack, tub
GLR: 1-box; 6-bin
NC: 46

(63.) Materials/Objects Used to Cover Things
RC: plug, canvas, cellophane
GLR: 2-cover;
6-tarpaulin
NC: 11

(64.) Weapons
RC: weapon, missle, gun, explosive, arrow
GLR: 2-gun; 6-ammunition
NC: 28

(65.) Building Materials (Wood)
RC: board, plank, lumber
GLR: 2-wood; 6-shingle
NC: 12

(66.) Building Materials (Nonwood)
RC: cement, pipe, pole
GLR: 2-bar; 6-pavement
NC: 25

(67.) General Names for Objects
RC: object, thing
GLR: 1-thing;
6-substance
NC: 3

(68.) Motion (General)
RC: action, motion, mobile
GLR: 4-motion; 5-activity
NC: 9

(69.) Lack of Motion
RC: stillness, dangle,
pause, still
GLR: 2-rest; 6-suspend
NC: 22

(70.) Beginning Motion
RC: beginning, start
GLR: 2-begin; 6-initiation
NC: 8

(71.) Happening
RC: do, occur, react
GLR: k-do; 6-commit
NC: 11

(72.) Completion
RC: end, finish
GLR: 2-finish; 6-complete
NC: 5

(73.) Lack of Completion
RC: stop, ban, clog, delay
GLR: 1-stop; stifle
NC: 17

(74.) General Actions Involving
Coming/Going
RC: journey, arrival,
depart, roam, come
GLR: k-go; 6-depart
NC: 36

(75.) Pursuit
RC: chase, pursue
GLR: 2-chase; 5-pursue
NC: 6

(76.) Taking/Bringing
RC: take, mail, remove,
place, deliver
GLR: k-put; 6-distribute
NC: 28

(77.) Tossing Actions
RC: toss, throw
GLR: 1-toss; 4-thrust
NC: 11

(78.) Pushing
RC: pull, push
GLR: 2-pull; 5-yank
NC: 9

(79.) Vibration
RC: tremble, shake,
jumble
GLR: 2-shake, 6-vibrate
NC: 17

(80.) Shifting Motion
RC: shift, skid,
GLR: 2-slide; 4-slip
NC: 5

(81.) Jerking Motion
RC: bounce, lurch
GLR: 2-bounce; 5-budge
NC: 6

(82.) Ascending Motion
RC: lift, hoist, rise
GLR: 1-blast-off;
6-ascend
NC: 6

(83.) Descending Motion
RC: plunge, lower,
drop
GLR: 1-fall; 6-slump
NC: 18

(84.) Descending Motion
Done by Humans
RC: sit, crouch
GLR: K-sit; 5-stoop
NC: 6

(85.) Reduction
RC: contraction,
shrink, cramp
GLR: 4-shorten;
6-shrivel
NC: 8

(86.) Expansion
RC: expansion, enlarge, sprawl, burst
GLR: 4-swell; 6-expand
NC: 22

(87.) Force
RC: force, propulsion
GLR: 3-force; 5-pressure
NC: 3

(88.) Closing/Opening Actions
RC: close, open
GLR: 2-open; 4-slam
NC: 4

(89.) Joining Activities
RC: connection, join, merge, combine
GLR: 3-join; 6-mingle
NC: 32

(90.) Separating Action
RC: separate, split, unfasten
GLR: 3-unfasten; 6-unwind
NC: 7

(91.) Neglect
RC: neglect, overlook, omit
GLR: 5-neglect; 6-overlook
NC: 5

(92.) Circular Motion
RC: spin, orbit, turn, encircle
GLR: k-around; 6-revolve
NC: 25

(93.) Building Action
RC: build, install, repair, restore
GLR: k-make; 6-modify
NC: 31

(94.) Wraping/Packing Actions
RC: wrap, bind, pack
GLR: 3-wrap; 6-unravel
NC: 12

(95.) Destructive Actions to Nonhumans
RC: accident, wreck, dent, ruin, smash
GLR: 2-break; 6-collide
NC: 20

(96.) Destructive Actions to Humans
RC: hurt, murder, cripple, torment
GLR: 2-hurt; 6-afflict
NC: 24

(97.) Fighting
RC: scuffle, fight, war
GLR: 1-fight; 6-combat
NC: 17

(98.) Actions Helpful to Humans
RC: help, nourish, cure, protect
GLR: k-help; 6-revive
NC: 26

(99.) Losing/Giving-up
RC: lose, dispose, exchange
GLR: 3-trade; 6-discard
NC: 14

(100.) Possession/Ownership
RC: have, own
GLR: k-have; 6-possess
NC: 7

(101.) Taking/Receiving Actions
RC: obtain, achieve, seize
GLR: k-get; 6-inherit
NC: 15

(102.) Finding/Keeping
RC: find, locate, keep
GLR: 1-find; 6-retain
NC: 7

(103.) Winning/Lossing
RC: win, overtake, triumph
GLR: 2-win; 6-conquest
NC: 18

(104.) Freeing Actions
RC: escape, flee, surrender
GLR: 3-free; 6-sacrifice
NC: 7

(105.) Feeling/Striking Actions
RC: feel, stroke, nudge, slap, pound
GLR: 2-pat; 6-prod
NC: 26

(106.) Grabbing/Holding Actions
RC: grab, clasp, pluck, grip
GLR: 1-hold; 6-clench
NC: 19

(107.) Specific Actions Done With the Hand
RC: point, wave
GLR: 2-point; 4-salute
NC: 5

(108.) Running/Walking
RC: run, jog, walk, trudge, hobble
GLR: k-run; 6-tread
NC: 26

(109.) Lurking/Creeping
RC: crawl, prowl, lurk
GLR: 2-crawl; 6-slither
NC: 6

(110.) Kicking
RC: kick, stomp
GLR: 2-stamp; 6-trample
NC: 5

(111.) Jumping
RC: hop, leap
GLR: k-jump; 5-leap
NC: 6

(112.) Standing/Stationary Actions
RC: stand, straddle
GLR: 2-stand
NC: 3

(113.) Facial Expressions
RC: smile, frown
GLR: 2-smile; 4-sneer
NC: 6

(114.) Actions Associated with the Nose
RC: smell, sneeze
GLR: 2-smell; 6-snore
NC:: 4

(115.) Actions Associated with the Mouth
RC: lick, suck
GLR: 2-lick, 5-spit
NC: 5

(116.) Breathing
RC: puff, exhale
GLR: 2-blow; 4-breathe
NC: 6

(117.) Actions Associated with Fear
RC: cower, wince
GLR: 6-flinch
NC: 3

(118.) Time (General)
RC: lifetime, daytime bedtime
GLR: 1-time; 5-mealtime
NC: 11

(119.) Devices Used to Measure Time
RC: clock, watch
GLR: 2-watch; 5-calendar
NC: 5

(120.) Parts of a Day
RC: noon, evening, night, minute
GLR: 1-day; 6-overnight
NC: 23

(121.) Periods of Time Longer Than a Day
RC: season, winter, age, century
GLR: 2-summer; 6-centennial
NC: 22

(122.) Months/Days
RC: January, February, Tuesday, Monday
GLR: --
NC: 19

(123.) Relative Time
RC: today, future, past, ancient
GLR: 1-tommorrow;6-ancestry
NC: 27

(124.) Prior Actions (Relationship Markers)
RC: earlier, beforehand, prior, farmer, recent
GLR: 1-after; 6-previous
NC: 27

(125.) Subsequent Action (Relationship Markers)
RC: later, eventually, next, afterwards
GLR: k-then; 6-latter
NC: 20

(126.) Concurrent Actions (Relationship Markers)
RC: as, while, now, meanwhile
GLR: K-now; 5-meanwhile
NC: 18

(127.) Speed
RC: hurry, frenzy, rush, fast, quick, swift
GLR: 1-race; 6-hasten
NC: 34

(128.) Duration
RC: frequent, permanent, rare, eternal, again, occasional, often
GLR: 1-again; 6-daily
NC: 45

(129.) Dates/Events (General)
RC: occasion, event, circumstance
GLR: 4-event; 6-instance
NC: 16

(130.) Festive/Recreational Events
RC: holiday, festival, parade, carnival
GLR: 1-party; 6-ceremony
NC: 23

(131.) Political Events
RC: campaign, election
GLR: 5-election; 6-campaign
NC: 5

(132.) Plays/Movies
RC: performance, movie, plot, scenery
GLR: k-show; 6-climax
NC: 14

(133.) Music/Dance (General)
RC: music, concert, ballet
GLR: 2-dance; 6-conduct
NC: 11

(134.) Instruments
RC: drum, violin
GLR: 3-piano; 5-fiddle
NC: 12

(135.) Art
RC: art, picture, sculpture
GLR: 1-picture; 6-mosaic
NC: 11

(136.) Sports/Recreation (General)
RC: sport, match, contest
GLR: 1-game; 6-competition
NC: 11

(137.) Specific Sports
RC: football, soccer, boxing, golf
GLR: 1-racing; 6-croquet
NC: 27

(138.) Equipment Used in Sports
RC: racket, bat, hurdle, goal
GLR: k-ball; 6-javeline
NC: 22

(139.) Exercising
RC: exercise, play, jog
GLR: k-play; 6-sprint
NC: 12

(140.) Magic
RC: magic, trick
GLR: 2-magic, 6-magical
NC: 5

(141.) Board Games
RC: cards, checkers
GLR: 2-cards; 6-checkers
NC: 3

(142.) Visual Images/Perception
RC: reflection, vision image, represent
GLR: 2-sight; 6-portray
NC: 10

(143.) Looking/Perceivng Actions
RC: look, glance, notice, peer, observe
GLR: K-see; 6-glower
NC: 29

(144.) Noises (General)
RC: noise, clatter, listen, hear, quiet
GLR: 1-sound; 6-lull
NC: 24

(145.) Devices That Produce Sound
RC: horn, bell, telephone
GLR: 2-horn; 6-earphone
NC: 12

(146.) Noises Made by People
RC: cheer, snore, shout, laugh, cry, mumble, chant
GLR: 1-laugh; 6-applaud
NC: 49

(147.) Animal Noises
RC: peep, croak, moo
GLR: 2-quack; 6-yap
NC: 31

(148.) Noises Made by Objects
RC: thud, creak, zoom, thump, jingle
GLR: 2-ring; 6-tinkle
NC: 27

(149.) The Body (General)
RC: body, hips, limbs
GLR: 3-body; 6-carcass
NC: 11

(150.) Body Coverings
RC: flesh, scar, hair, skin
GLR: 1-hair; 6-blubber
NC: 14

(151.) The Head
RC: mind, cheek, cerebellum
GLR: 1-head; 5-skull
SC: medula
NC: 12

(152.) Mount/Throat
RC: teeth, lip, tongue, throat
GLR: 2-mouth; 6-fang
NC: 11

(153.) Eyes/Ears/Nose
RC: ear, eye, nose
GLR: 2-eye; 6-eyelash
NC: 11

(154.) Limbs
RC: arm, leg, hand
GLR: 1-hand; 6-knuckle
NC: 12

(155.) Legs/Feet
RC: foot, leg, knee
GLR: 1-leg; 6-haunch
NC: 11

(156.) Internal Organs
RC: liver, lung
GLR: 3-stomach; 5-lung
NC: 7

(157.) Internal Bodily Fluids
RC: blood, vein, bleed
GLR: 4-vein; 6-perspiration
SC: mucus
NC: 15

(158.) Bones/Muscles/Nerves
RC: rib, muscle, nerve
GLR: 2-bone; 6-nerve
SC: ligament
NC: 15

(159.) Bodily Systems
RC: reproductive, respiratory
GLR: 5-reproductive
SC: circulation
NC: 9

(160.) Life/Birth/Death
RC: life, live, death, birth, hatch, spawn
GLR: 1-live; 6-existence
NC: 25

(161.) Survival/Growth
RC: survive, thrive, mature
GLR: 2-grow; 6-evolve
NC: 13

(162.) Physical Traits
RC: strong, strength, weak, clumsy
GLR: 2-strong; 6-graceful
NC: 22

(163.) Neatness
RC: neat, tidy
GLR: 3-neat; 5-tidy
NC: 4

(164.) Attractiveness
RC: pretty, handsome, gorgeous
GLR: 2-lovely; 6-majestic
NC: 15

(165.) Size as a Physical Trait
RC: slender, skinny, husky
GLR: 1-fat; 6-lanky
NC: 10

(166.) Diseases (General)
RC: disease, illness, sick, well
GLR: 2-well, 6-plague
NC: 16

(167.) Specific Diseases/ Ailments
RC: cancer, polio, cold, blind
GLR: 2-burn; 6-influence
SC: virus
NC: 18

(168.) Symptoms of Diseases
RC: pain, weariness, sore
GLR: 4-ache; 6-fatigue
NC: 11

(169.) Specific Types of Germs
RC: germ, bacteria
GLR: 3-germ; 6-organism
SC: enzyme
NC: 7

(170.) Actions Related to Injury/Disease
RC: burn, wound
GLR: 2-burn; 6-paralyze
NC: 6

(171.) Medicine
RC: medicine, drug, bandage, transfusion
GLR: 2-medicine; 6-surgery
SC: vaccine
NC: 27

(172.) Uncleanliness/Filth
RC: garbage, trash, junk, dirty, filthy
GLR: 4-trash; 6-sanitation
NC: 27

(173.) Cleanliness
RC: wash, clean, purify
GLR: 2-wash; 6-sanitation
NC: 15

(174.) Tools for Cleaning
RC: broom, soap, toothbrush
GLR: 3-brush; 6-toothpick
NC: 11

(175.) Types of Meals
RC: supper, meal, feast, dessert
GLR: 2-dinner; 5-refreshment
NC: 14

(176.) Food Types (General)
RC: fruit, meat, seafood, nourishment, vegetables
GLR: 1-food; 6-supplies
NC: 16

(177.) Sweets
RC: honey, cookie, pudding, chocolate
GLR: k-cake; 6-custard
NC: 23

(178.) Prepared Foods
RC: noodles, muffins, bread, cereal, sandwich
GLR: 3-bread; 6-cereal
NC: 22

(179.) Meats
RC: ham, bacon
GLR: 4-sausage; 6-steak
NC: 8

(180.) Dairy Products
RC: butter, cheese
GLR: 2-egg; 5-margarine
NC: 6

(181.) Ingredients Used to Prepare Foods
RC: flour, dough, salt, pepper
GLR: 3-sugar; 6-spice
NC: 22

(182.) Things to Drink
RC: pop, tea, wine, soup
GLR: 2-milk; 6-broth
NC: 26

(183.) Fruits
RC: pear, plum, cherry, orange, banana
GLR: 2-apple; 6-melon
NC: 25

(184.) Vegetables
RC: tomato, pumpkin, rice, acorn
GLR: 1-nut; 6-maize
NC: 40

(185.) Actions Done to/with Food
RC: bake, boil, blend, ripen
GLR: 2-cook; 6-simmer
NC: 19

(186.) Food Tastes
RC: bitter, rotten, juicy
GLR: 2-sweet; 6-rotten
NC: 15

(187.) Eating/Drinking Actions
RC: taste, chew, drink
GLR: k-eat; 6-consume
NC: 16

(188.) Hunger/Thirst
RC: hunger, appetite, thirst
GLR: 4-starve; 6-appetite
NC: 8

(189.) Smoking
RC: pipe, cigar, cigarette
GLR: 3-pipe
NC: 3

(190.) Man Made Structures (General)
RC: building, structure
GLR: 2-tower; 6-construction
NC: 8

(191.) Places to Live in/Stay in
RC: apartment, mansion, motel, dwelling
GLR: k-house; 6-habitat
NC: 21

(192.) Places of Protection/ Incarceration
RC: fort, cell, prison
GLR: 1-cage; 6-dungeon
NC: 14

(193.) Places Where Goods Are Bought/Sold
RC: store, market, drugstore
GLR: 1-store; 6-tavern
NC: 12

(194.) Mills/Factories
RC: mill, workshop, factory
GLR: 2-shop, 6-studio
SS: refinery
NC: 12

(195.) Places for Learning/ Experimentation
RC: school, college, library, laboratory
GLR: 1-school; 6-university
NC: 17

(196.) Places for Sports
RC: court, stadium
GLR: 4-gym; 6-arena
NC: 17

(197.) Medical Facilities
RC: hospital, ward, clinic
GLR: 3-hospital; 6-clinic
NC: 7

(198.) Places for Prayer/Worship
RC: chapel, shrine, church, cathedral
GLR: 3-church; 6-cathedral
NC: 10

(199.) Places for Transportation
RC: airport, terminal, station, depot
GLR: 2-station, 6-depot
NC: 4

(200.) Places Used for Storage
RC: hut, shed, warehouse, barn, storeroom
GLR: 1-barn; 5-storeroom
NC: 10

(201.) Places for Farming/ Ranching
RC: ranch, plantation, farm
GLR: 1-farm, 5-plantation
NC: 5

(202.) Monuments
RC: monuments, landmark, memorial, totem
GLR: 5-totem; 6-memorial
NC: 4

(203.) Rooms
RC: kitchen, bathroom, den, hall, room, parlor
GLR: 2-room; 6-parlor
NC: 20

(204.) Parts of Houses
RC: chimney, wall, roof, window, stairs, hearth
GLR: 2-wall; 6-hearth
NC: 22

(205.) Fences
RC: fence, hedge, gate, curb
GLR: 2-gate; 6-curb
NC: 10

(206.) Furniture
RC: table, chair, rocker, cabinet
GLR: 1-table, 6-rocker
NC: 16

(207.) Decorations
RC: curtain, carpet, vase, rug
GLR: 3-rug; 6-canopy
NC: 16

(208.) Linens
RC: pillow, blanket sheet
GLR: 2-cover; 6-cushion
NC: 13

(209.) Areas of Land
RC: acre, area, spot, territory
GLR: 2-place; 6-premises
NC: 22

(210.) Characteristis of Places
RC: tropical, rural, metropolitan
GLR: 4-tropical; 6-metropolitan
NC: 17

(211.) Valleys/Craters
RC: cave, canyon, crater, ditch
GLR: 2-hole; 6-chasm
NC: 27

(212.) Mountains/Hills
RC: mountain, slope, peak, hill
GLR: 1-hill; 6-embankment
NC: 21

(213.) Forests
RC: jungle, meadow, glen
GLR: 2-forest; 5-woodland
NC: 12

(214.) Fields
RC: orchard, vineyard, field
GLR: 2-field; 6-paddy
NC: 9

(215.) Parks/Yards
RC: park, playground, patio, yard
GLR: 2-yard; t-playground
NC: 11

(216.) Bodies in Space
RC: earth, universe, planet
GLR: 2-world; 5-universe
SC: galaxy
NC: 23

(217.) Places Where People Live
RC: neighborhood, city, slum, country, town
GLR: 1-town; 6-empire
NC: 21

(218.) Continents/Countries
RC: continent, country, United States, North America
GLR: 4-country
SS: America
NC: 24

(219.) States
RC: Washington, Oregon, Colorado
GLR: --
SS: Colorado
NC: 55

(220.) Cities
RC: Denver, Seattle, New York
GLR: --
SS: Dallas
NC: 54

(221.) Locations (General)
RC: direction, location, position
GLR: 3-distance; 6-location
NC: 9

(222.) Boundaries
RC: corner, edge, margin, side
GLR: 2-side; 6-brink
NC: 15

(223.) Planes
RC: diagonal, vertical, horizontal
GLR: 6-verticle
MA: diagonal
NC: 6

(224.) Nonspecific or Context Specific Locations
RC: there, somewhere, here
GLR: k-here; 4-elsewhere
NC: 9

(225.) Compass Directions
RC: north, south, right, southern
GLR: 1-right; 6-midwest
NC: 26

(226.) Back/Front/Middle
RC: back, end, front, middle
GLR: 1-back; 6-central
NC: 19

(227.) Directions To/From
RC: at, to
GLR: k-from
NC: 3

(228.) Inward/Outward Direction
RC: inside, internal, outside
GLR: K-in; 6-interim
NC: 17

(229.) Up/On
RC: on, atop, up, upward
GLR: k-up; 5-atop
NC: 23

(230.) Down/Under
RC: under, below, down
GLR: k-down; 6-downward
NC: 13

(231.) Distance
RC: distant, beyond, close, local, away
GLR: k-away; 6-abreast
NC: 26

(232.) Presence/Absence
RC: present, absent, presence
GLR: 3-present; 6-absence
NC: 6

(233.) Metals
RC: iron, lead, graphite, uranium
GLR: 2-gold; 6-cobalt
SC: coke
NC: 45

(234.) Rocks/Jewels
RC: stone, slate, jewel, ruby, rock
GLR: 2-rock; 6-gravel
NC: 22

(235.) Characteristics of Rocks
RC: crude, sedimentary, bituminous
GLR:
SC: bituminous
NC: 4

(236.) Actions of Metals
RC: rust, tarnish
GLR: 4-rust
NC: 3

(237.) Soil Types
RC: dirt, clay, sand, dust
GLR: 2-sand; 6-ore
NC: 14

(238.) Actions Done to Soil/Crops
RC: plow, cultivate, harvest
GLR: 3-till; 6-cultivate
NC: 14

(239.) Chemicals
RC: oxygen, hydrogen, sodium
GLR: 2-helium; 5-nitrate
SC: boron
NC: 25

(240.) Acids
RC: acid, sulfuric
GLR: 5-acid
SC: hydrochloric
NC: 3

(241.) Electricity
RC: electric, electronic, radiation
GLR: 3-electricity; 6-radiation
NC: 8

(242.) Molecules/Atoms
RC: molecule, atom, proton
GLR: 5-ion; 6-electron
SC: nucleus
NC: 13

RC: hard, soft, rough, coarse
GLR: 1-hard; 6-coarse
NC: 21

(244.) Durability
RC: flimsy, fragile, durable, strong
GLR: 2-strong; 6-frail
NC: 9

(245.) Clothing (General)
RC: costume, suit, garment
GLR: 2-suit; 6-garment
NC: 10

(246.) Parts of Clothing
RC: button, lining, pocket
GLR: 1-pocket, 5-seam
NC: 10

(247.) Shirts/Pants/Skirts
RC: shirt, blouse, trousers, skirt
GLR: 1-dress; 6-gown
NC: 15

(248.) Things Worn on the Head
RC: cap, bonnet, hood, hat
GLR: 1-hat; 6-visor
NC: 12

(249.) Things Worn on the Hands/Feet
RC: boot, sock, sandal, gloves, shoe
GLR: 1-shoe; 6-stockings
NC: 13

(250.) Coats
RC: shawl, cloak, coat, jacket
GLR: 1-coat, 6-shroud
NC: 9

(251.) Clothing Accessories
RC: tie, belt, umbrella, comb, tassel
GLR: 2-ring; 6-tassel
NC: 25

(252.) Armor
RC: armor, shield
GLR: 5-armor; 6-shield
NC: 3

(253.) Actions Done to/with Clothing
RC: wear, fold, design, sew
GLR: 2-wear; 6-embroider
NC: 23

(254.) Characteristics of Clothes & Wearing Clothes
RC: threadlike, sheer, naked
GLR: 5-threadlike; 6-sheer
NC: 10

(255.) Fabrics
RC: material, thread, silk, wool, cloth
GLR: 2-cloth; 6-satin
NC: 23

(256.) Smell/Scent
RC: scent, fragrance, smell
GLR: 2-smell; 6-odor
NC: 8

(257.) Animals (General)
RC: pet, creature, animal
GLR: 1-animal; 4-beast
NC: 11

(258.) Cats/Dogs
RC: cat, tiger, dog, wolf
GLR: k-dog; 6-jackal
NC: 25

(259.) Reptiles/Mythical Animals
RC: snake, reptile, monster, dragon
GLR: 2-dragon; 5-anaconda
NC: 13

(260.) Baby Animals
RC: kitten, colt, chick, puppy
GLR: 2-puppy; 6-duckling
NC: 13

(261.) Land Animals (General)
RC: deer, horse, elk, pig, goat, bear, zebra
GLR: 1-bear; 6-bull
NC: 44

(262.) Rodents
RC: mouse, squirrel, rabbit
GLR: 2-squirrel; 6-weasle
NC: 18

(263.) Primates
RC: monkey, gorilla
GLR: 2-monkey; 6-ape
NC: 6

(264.) Sea Animals
RC: whale, fish, tuna, goldfish
GLR: k-fish; 6-catfish
NC: 24

(265.) Shellfish and Others
RC: shrimp, eel, crab, oyster, octopus
GLR: 4-oyster, 6-sponge
NC: 21

(266.) Birds
RC: robin, canary, gull, turkey, eagle, owl
GLR: 1-bird; 6-nightingale
NC: 30

(267.) Insects
RC: butterfly, spider, mosquito, ant, moth,
GLR: 1-bee; 6-mite
NC: 30

(268.) Parts of Animals
RC: hide, pelt, antler, fur, tail, beak
GLR: 2-tail, 6-plume
NC: 14

(269.) Animal Dwellings
RC: zoo, kennel, nest
GLR: 1-zoo; 6-stockyard
NC: 14

(270.) Animal Equipment
RC: rein, horseshoe, collar, saddle
GLR: 3-saddle; 6-muzzle
NC: 10

(271.) Animal Actions
RC: fly, buck, gallop
GLR: 1-fly; 6-shod
NC: 16

(272.) Water (Different Forms)
RC: liquid, rain, hail, snow, ice
GLR: 1-water; 6-snowflake
NC: 22

(273.) Actions Related to Water
RC: drip, seep, spray, pour, swim, dive, flow, boil, sprinkle
GLR: 4-sprinkle; 6-surge
NC: 51

(274.) Equipment Used with Liquids
RC: fountain, pump, hose
GLR: 3-hose; 6-funnel
NC: 10

(275.) Moisture
RC: dew, mist, haze
GLR: 4-mist; 6-moisture
NC: 10

(276.) Slime
RC: slime, sediment, scum
GLR: 3-scum; 6-froth
SC: silt
NC: 6

(277.) Bodies of Water
RC: river, pond, lagoon, reef, ocean, stream
GLR: 2-stream; 6-tributary
NC: 32

(278.) Places Near Water
RC: island, shore, seashore
GLR: 3-shore; 6-isle
NC: 12

(279.) Directions Related to Water
RC: ashore, downstream, overboard, offshore
GLR: 4-underwater; 6-offshore
NC: 11

(280.) Man Made Places Near Water
RC: seaport, dock, dam, harbor
GLR: 3-harbor; 6-pier
NC: 10

(281) Vegetation (General)
RC: shrub, bush, tree, vegetation
GLR: k-tree; 6-underbrush
NC: 11

(282.) Types of Trees
RC: pine, locust, elm, spruce, oak
GLR: 2-oak; 6-cedar
NC: 22

(283.) Parts of Trees
RC: branch, stump, leaf
GLR: 2-branch; 6-bough
NC: 15

(284.) Flowers
RC: blossom, seed, rose, daisy
GLR: 2-flower; 6-hemp
SC: pistil
NC: 38

(285.) Other Vegetation
RC: algae, grass, hay, root, grass
GLR: 1-grass; 6-thatch
SC: kelp
NC: 23

(286.) People (General)
RC: human, people, mankind
GLR: 2-people; 5-self
NC: 10

(287.) Names for Women
RC: woman, widow, lass, female, girl
GLR: 1-girl; 6-housewife
NC: 17

(288.) Names for men
RC: boy, male, sir, guy, gentleman
GLR: k-guy; 6-host
NC: 12

(289.) Names Indicating Youth/Age
RC: infant, youth, child, elder, baby
GLR: 1-baby; 6-infant
NC: 20

(290.) Names Indicating Friendship
RC: neighbor, ally, pal, lover, friend
GLR: 1-friend; 6-comrade
NC: 17

(291.) Names for Spiritual/ Mythical People
RC: fairy, spirit, saint, goblin, wizard
GLR: 2-fairy; 6-colasus
NC: 17

(292.) Names Indicating Negative Characteristics of People
RC: liar, gossip, enemy, grouch, outlaw, thief
GLR: 3-thief; 6-pest
NC: 28

(293.) Names Indicating Lack of Permanence for People
RC: guest, rover, runaway, visitor
GLR: 3-visitor; 6-wanderer
NC: 15

(294.) Names Indicating Permanence for People
RC: settler, dweller, resident
GLR: 4-settler; 6-immigrant
NC: 17

(295.) Names Indicating Size of People
RC: giant, midgit, pygmy
GLR: 2-giant; 6-pygmy
NC: 5

(296.) Names Indicating Fame
RC: celebrity, hero, idol
GLR: 2-star; 6-idol
NC: 7

(297.) Names Indicating Knowledge of a Topic
RC: expert, genius, novice
GLR: 4-expert; 6-amateur
NC: 7

(298.) Names Indicating Financial Status of People
RC: millionaire, miser
GLR: 6-pauper
NC: 4

(299.) Family Relations
RC: dad, mother, parent, sister, brother
GLR: k-daddy; 6-niece
NC: 45

(300.) Names of People Indicating Political Disposition
RC: democrat, patriot, socialist
GLR: 5-confederate; 6-patriot
SS: republican
NC: 16

(301.) Names of Occupations
RC: career, task, job
GLR: 2-job; 6-profession
NC: 20

(302.) Supervisors
RC: manager, leader, sponsor, owner
GLR: 3-owner, 6-employer
NC: 22

(303.) Royalty/Statesmen
RC: mayor, governor, queen, baron
GLR: 2-king; 6-squire
NC: 45

(304.) Names for People in Sports
RC: player, boxer, coach, acrobat
GLR: 3-batter; 6-contestant
NC: 27

(305.) Reporters/Writers
RC: author, poet, writer, reporter
GLR: 3-reporter; 6-historian
NC: 13

(306.) Outdoor Professions
RC: hunter, cowboy, rancher, farmer, logger
GLR: 2-cowhand; 5-forester
NC: 31

(307.) Artists
RC: painter, conductor, artist, musician
GLR: 4-musician; 6-sculptor
NC: 13

(308.) Entertainers
RC: dancer, actor, clown
GLR: 2-actor; 6-actor
NC: 11

(309.) Teachers/Advisors
RC: professor, student, counselor, teacher
GLR: 2-teacher; 6-tutor
NC: 11

(310.) Public Servants
RC: policeman, sheriff, officer, trooper
GLR: 1-fireman; 6-trooper
NC: 9

(311.) Scientists/Discoverers
RC: scientist, biologist, discoverer, inventor
GLR: 3-inventor; 6-chemist
SC: botanist
NC: 20

(312.) Areas of Work
RC: business, science, biology, education, medicine
GLR: 3-medicine; 6-politics
NC: 21

(313.) Buying/Selling Related Occupations
RC: salesman, customer, merchant, vendor
GLR: 3-peddler; 6-vendor
NC: 11

(314.) Small Businessmen
RC: butcher, grocer, blacksmith
GLR: 4-butcher; 6-milkman
NC: 14

(315.) People Who Work in Offices
RC: businessman, secretary
GLR: 4-businessman; 6-typist
NC: 5

(316.) Builders
RC: builder, manufacturer
GLR: 5-builder
NC: 3

(317.) Printers/Publishers
RC: printer; publisher
GLR: 3-printer; 6-scribe
NC: 4

(318.) People Who Clean-up
RC: garbageman, janitor
GLR: 4-garbageman; 5-janitor
NC: 3

(319.) Occupations Related to Money
RC: banker, cashier
GLR: 4-banker; 6-teller
NC: 4

(320.) Occupations Related to Prisons
RC: captive, guard, prisoner
GLR: 3-guard; 6-warden
NC: 8

(321.) Occupations Related to Medicine
RC: nurse, patient, doctor
GLR: 2-doctor; 6-surgeon
NC: 7

(322.) Occupations Related to Transportation
RC: pilot, porter, flier
GLR: 3-pilot, 5-seamen
NC: 8

(323.) Clergy/Religious
RC: priest, bishop, cardinal
GLR: 3-cardinal; 6-missionary
NC: 11

(324.) Repairmen
RC: plumber, carpenter, mechanic
GLR: 3-repairman; 6-mechanic
NC: 6

(325.) Legal Occupations/Participants
RC: defendant, witness, judge
GLR: 3-judge; 6-lawyer
NC: 9

(326.) Servants
RC: maid, servant
GLR: 3-maid; 5-usher
NC: 4

(327.) Occupations Related to Restaurants
RC: dishwasher, waitress, chef
GLR: 2-dishwasher; 5-chef
NC: 5

(328.) Messengers
RC: messenger, postmaster
GLR: 4-messenger; 6-postmaster
NC: 5

(329.) Occupations Usually Held by Youth
RC: babysitter, paperboy
GLR: 3-babysitter
NC: 2

(330.) Work Related Actions
RC: work, overwork, toil, employ
GLR: k-work; 6-retire
NC: 12

(331.) Money/Goods You Receive
RC: fortune, prize, salary treasure, reward
GLR: 1-prize; 6-wage
NC: 29

(332.) Money/Goods You Pay Out
RC: tax, fee, price, cost
GLR: 3-cost; 6-debt
NC: 15

(333.) Types of Money
RC: money, cash, penny, dime
GLR: 1-penny; 6-finance
NC: 24

(334.) Money Related Actions
RC: earn, spend, buy
GLR: 2-earn; 5-purchase
NC: 14

(335.) Money Related Characteristics
RC: costly, free, cheap, poor
GLR: 3-free; 6-inexpensive
NC: 8

(336.) Places Where Money Is Kept
RC: safe, purse, bank
GLR: 2-bank; 6-mint
NC: 6

(337.) Weather/Nature (General)
RC: climate, nature, environment
GLR: 3-weather; 6-environment
NC: 6

(338.) Storms
RC: storm, downpour, hurricane, tornado, torrent
GLR: 2-wind; 6-torrent
NC: 22

(339.) Clouds
RC: cloud, circus, cumulus
GLR: 3-cloud;
SC: cumulus
NC: 6

(340.) Natural Catastrophies
RC: flood, disataster, earthquake, avalanche
GLR: 3-drought; 6-avalanche
NC: 14

(341.) Characteristics of Weather
RC: icy, sunny, foggy
GLR: 3-foggy; 6-wintry
NC: 7

(342.) Names/Titles
RC: title, label, name, heading
GLR: 1-name; 6-inscription
NC: 15

(343.) Types of Literature
RC: composition, story, fiction, fable
GLR: 1-story; 6-mythology
NC: 11

(344.) Types of Books
RC: textbook, novel, manual, magazine, encyclopedia
GLR: k-book; 6-manual
NC: 34

(345.) Poems/Songs
RC: poem, music, hymn, tune
GLR: 2-sing; 6-hymn
NC: 21

(346.) Drawings/Illustrations
RCL: illustration, drawing, diagram
GLR: 4-drawing; 6-graph
NC: 6

(347.) Messages
RC: postcard, telegram, letter, bulletin
GLR: 1-letter; 6-slogan
NC: 19

(348.) Things to Write With/On
RC: pen, crayon, notebook paper
GLR: 2-paper; 6-manuscript
NC: 18

(349.) Rules/Laws
RC: law, proposal, policy, rule
GLR: 3-rule; 6-contract
NC: 14

(350.) Reading/Writing/Drawing Actions
RC: scribble, sign, copy, draw, write
GLR: 2-write; 6-illustrate
NC: 33

(351.) Language and Language Conventions
RC: grammar, accent, dialect, diction
GLR: 3-language; 6-diction
NC: 19

(352.) Words/Sentences
RC: sentence, phrase, prefix, syllable
GLR: k-word; 6-phrase
EN: pronoun
NC: 25

(353.) Letters/Alphabet
RC: alphabet, symbol, notation, letter
GLR: 1-letter; 6-notation
NC: 11

(354.) Oral Communication (General)
RC: statement, remark, correspond, talk
GLR: 1-talk; 6-exclamation
NC: 25

(355.) Communication Involving Confrontation or Negative Information
RC: argument, complain, condemn, insult, threat, disobey
GLR: 3-complain; 6-curse
NC: 54

(356.) Communications Involving General Presentation of Information
RC: tell, explain, show, claim, declare
GLR: k-show; 6-convey
NC: 26

(357.) Communications Involving Positive Information
RC: truce, greeting, assure, support
GLR: 2-greeting; 6-congratulations
NC: 24

(358.) Persuasion
RC: convince, influence, urge, suggest
GLR: 4-suggest; 6-coax
NC: 18

(359.) Questions
RC: question,reply,quiz,ask
GLR: k-ask; 6-inquire
NC: 20

(360.) Communications Involving Supervision/Commands
RC: command, require, obey, control, let
GLR: k-let; 6-dominate
NC: 38

(361.) Giving Out Information Previously Withheld
RC: admit, confide, confess
GLR: 4-confess; 6-confide
NC: 4

(362.) Promises
RC: vow, oath, promise
GLR: 3-promise; 6-pledge
NC: 5

(363.) Recording or Translating Information
RC: quote, translation, record
GLR: 5-quote; 6-interpretation
NC: 8

(364.) Exclamation (General)
RC: oh,alas,ha,hey,yes,hi
GLR: k-no; 6-bravo
NC: 30

(365.) Thought/Memory (General)
RC: memory, thought, wonder, consider, think
GLR: 1-think; 6-ponder
NC: 20

(366.) Subjects/Topics
RC: topic, scheme, plan objective
GLR: 2-plan; 6-theme
NC: 10

(367.) Mental Exploration
RC: search, examine, experiment, explore
GLR: 3-explore; 6-examination
NC: 15

(368.) Mental Actions Involving Conclusions
RC: solve, compose, prove, discover, invent
GLR: 3-invent, 6-conclude
NC: 35

(369.) Consciousness
RC: awake, dream, sleep, asleep
GLR: 1-sleep, 6-unconscious
NC: 26

(370.) Interest
RC: attention, intrigue
GLR: 3-interest; 6-intrigue
NC: 5

(371.) Teaching/Learning Actions
RC: coach, teach, learn know
GLR: k-know; 5-instruction
NC: 25

(372.) Processes and Procedures
RC: method, procedure, process
GLR: 5-process; 6-maneuvor
NC: 5

(373.) Definition
RC: definition, meaning
GLR: 5-definition
NC: ?

(374.) Choice
RC: choose, decide, pick
GLR: 2-pick; 6-appoint
NC: 16

(375.) Intelligence
RC: wisdom, smart, stupid, alert, aware, wise
GLR: 2-wise; 6-cunning
NC: 28

(376.) Beliefs
RC: belief, superstition, custom
GLR: 4-custom; 6-philosophy
NC: 8

(377.) Names for Feelings (General)
RC: feeling, emotion, mood
GLR: 4-mood; 6-sensation
NC: 6

(378.) Fear
RC: fright, terror, startle, terrify, afraid
GLR: 2-afraid; 6-agony
NC: 23

(379.) Worry/Shame
RC: shame, concern, worry, anxious
GLR: 3-wary; 6-anxiety
NC: 15

(380.) Anger
RC: anger, revenge, fury, outrage, hostile, irrate
GLR: 2-angry; 6-distain
NC: 29

(381.) Meanness/Cruelty
RC: cruel, vicious, mean, vicious
GLR: 2-mean; 6-destructive
NC: 13

(382.) Irritability
RC: scornful, unfriendly, grumpy
GLR: 2-grumpy; 5-disagreeable
NC: 8

(383.) Sadness
RC: sad, distress, sorry, grieve
GLR: 2-sad; 6-forlorn
NC: 18

(384.) General Upset
RC: bother, disturb, sullen, upset
GLR: k-upset; 6-somber
NC: 16

(385.) Excitement
RC: amazement, ecstacy, amaze, excite
GLR: 1-surprise; 6-passion
NC: 22

(386.) Fun/Joy
RC: happiness, pleasure, happy, gay, fun
GLR: k-fun; 6-gleeful
NC: 29

(387.) Comfort/Contentment
RC: comfort, calm, soothe, console
GLR: 3-calm; 6-console
NC: 23

(388.) Jealousy/Envy
RC: envy, jealousy
GLR: 4-jealous; 6-protective
NC: 8

(389.) Hope/Doubt
RC: trust, doubt, suspicion
GLR: 2-hope; 6-suspicion
NC: 9

(390.) Liking/Caring
RC: care, love, like, revere, support
GLR: k-like; 6-entrust
NC: 28

(391.) Desire
RC: wish, want, desire
GLR: k-want; 6-yearn
NC: 12

(392.) Traits Not Related to Emotions
RC: ability, aspect, quality, trait
GLR: 4-skill; 6-trait
NC: 15

(393.) Kindness/Goodness
RC: charity, courtesy, kind, polite, nice
GLR: 1-kind; 6-affectionate
NC: 31

(394.) Eagerness/Reliability
RC: busy, poise, eager, confidence, diligence, trustworthy
GLR: 2-busy; 6-ambitious
NC: 37

(395.) Lack of Initiative
RC: lazy, aimless, idle
GLR: 2-lazy; 6-idle
NC: 7

(396.) Freedom/Independence
RC: freedom independence, dependent
GLR: 4-freedom; 6-dependent
NC: 4

(397.) Confidence/Pride
RC: sure, confident
GLR: 2-proud; 6-dominant
NC: 6

(398.) Patience
RC: patient, impatient
GLR: 3-patient; 6-expectant
NC: 3

(399.) Luck/Prosperity
RC: fortunate, successful, lucky
GLR: 2-lucky; 5-prosperous
NC: 7

(400.) Strictness
RC: strict, stubborn, staunch
GLR: 3-strict; 6-staunch
NC: 5

(401.) Humor
RC: witty, humorous, funny
GLR: k-funny; 6-humorous
NC: 4

(402.) Spirituality
RC: spiritual, religious, sacred
GLR: 5-religious; 6-sacred
NC: 7

(403.) Prudence
RC: prudence, modesty
GLR: 4-prudence; 5-modesty
NC: 2

(404.) Shyness
RC: meek, timid, shy
GLR: 3-shy; 6-reluctant
NC: 7

(405.) Dishonesty
RC: dishonest, phony, tricky
GLR: 5-tricky, 6-mischievous
NC: 8

(406.) Loyalty/Courage
RC: loyalty, treason, courage, heroic, honor
GLR: 3-honor; 6-courageous
NC: 29

(407.) Instability
RC: crazy, reckless, wild
GLR: 3-wild; 6-unstable
NC: 12

(408.) Caution
RC: watchful, cautious, caution
GLR: 2-careful; 6-caution
NC: 6

(409.) Right/Wrong
RC: truth, mistake, correct, incorrect
GLR: 1-right; 6-fairness
NC: 29

(410.) Success
RC: succeed, fail, failure
GLR: 4-success; 6-failure
NC: 4

(411.) Importance/Value
RC: important, main, good, worthwhile, terrific, magnificent, precious
GLR: k-good; 6-spectacular
NC: 49

(412.) Lack of Value
RC: useless, awful, unfit, insignificant, faulty, bad
GLR: 2-bad; 6-negative
NC: 26

(413.) Popularity/Familiarity
RC: familiar, popular, obvious, common
GLR: 3-common; 6-standard
NC: 24

(414.) Lack of Popularity/ Familiarity
RC: unknown, private, secrecy
GLR: 3-secret; 6-privacy
NC: 10

(415.) Likelihood
RC: likely, certain, doubtful
GLR: 2-sure; 6-definite
NC: 18

(416.) Conformity to a Norm
RC: original, unique, strange, distinct
GLR: 2-strange; 6-distinct
NC: 15

(417.) Complexity/Order
RC: complex, plain, elaborate
GLR: 3-pure; 6-elaborate
NC: 19

(418.) Difficulty
RC: difficulty, ease, impossible, simplify
GLR: 2-easy; 5-simplify
NC: 13

(419.) Danger
RC: safety, hazardous, unsafe, peril
GLR: 2-safe; 6-peril
NC: 17

(420.) Auxiliary Verbs
RC: am, have, do, will
GLR: k-are; 2-might
NC: 40

(421.) Linking Verbs
RC: seem, appear, stay
GLR: 1-stay; 4-remain
NC: 6

(422.) Personal Pronouns
RC: he, my, who, anyone
GLR: k-he; 4-nobody
NC: 50

(423.) Contractions
RC: I'll, I'm, you're
GLR: 1-won't; 6-isn't
NC: 49

(424.) Attitudinals
RC: surely, maybe, wisely naturally, luckily
GLR: 2-really, 6-unfortunately
NC: 9o

(425.) Causality
RC: result, cause, stimulate, reason
GLR: 3-reason; 6-motive
NC: 23

(426.) Causality (Relationship Markers)
RC: by, because, hence, therefore
GLR: k-then; 6-hence
NC: 36

(427.) Likeness
RC: like, copy, equal, similar
GLR: 2-like; 6-equivalent
NC: 32

(428.) Addition (Relationship Markers)
RC: and, too, move over, indeed
GLR: k-too; 6-furthermore
NC: 18

(429.) Difference
RC: difference, separate, comparison, different
GLR: 2-different; 6-unequal
NC: 19

(430.) Contrast (Relationship Marker)
RC: but, whereas, although
GLR: K-or; 6-despite
NC: 39